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| APPLICATION NO. FILING DATE           |                 | FIRST NAMED INVENTOR               | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|---------------------------------------|-----------------|------------------------------------|-------------------------|------------------|--|
| 09/534,196 03/24/2000                 |                 | Christian Francois Michel Dujarric | Q58472                  | 2963             |  |
| 7:                                    | 590 12/20/2002  |                                    |                         |                  |  |
| Sughrue Mion Zinn Macpeak & Seas PLLC |                 |                                    | EXAMINER                |                  |  |
|                                       | ania Avenue N W | KOCZO JR, MICHAEL                  |                         |                  |  |
| wasnington, D                         | C 20037-3202    |                                    | ART UNIT                | PAPER NUMBER     |  |
|                                       |                 |                                    | 3746                    | 21               |  |
|                                       |                 |                                    | DATE MAILED: 12/20/2002 | ~(               |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| , a   | _  |  |   |  | 11/                                    |  |  |  |
|---|--|--|---|--|--|--|--|--|
|   |  | Ap   | plication No.   | Applicant(s)   | V                                      |  |  |  |
| Office Action Summary   |  |  | 9/534,196   | FRANCOIS MICH  | DUJARRIC, CHRISTIAN<br>FRANCOIS MICHEL |  |  |  |
|   |  |  | aminer  | Art Unit   |  |  |  |  |
|   | The MAILING DATE of this commu   |  | chael Koczo, Jr.  | 3746   | dess -                                 |  |  |  |
|   | for Reply  | , ,  |   |  | uuress                                 |  |  |  |
| TH(<br>- Ex<br>af<br>- If I<br>- Fa<br>- Ar   | HORTENED STATUTORY PERIOD IS MAILING DATE OF THIS COMMUNITY tensions of time may be available under the provision or SIX (6) MONTHS from the mailing date of this come he period for reply specified above is less than thirty (NO period for reply is specified above, the maximum sillure to reply within the set or extended period for reply reply received by the Office later than three months med patent term adjustment. See 37 CFR 1.704(b). | NICATION. us of 37 CFR 1.136(a). umunication. umunication. umunication with a reply with a reply will ap un will, by statute, caus | In no event, however, may a<br>in the statutory minimum of thi<br>ply and will expire SIX (6) MOI<br>to the application to become A | reply be timely filed<br>rty (30) days will be considered time<br>NTHS from the mailing date of this of<br>BANDONED (35 U.S.C. § 133). | oly.<br>communication.                 |  |  |  |
| 1)∑   | Responsive to communication(s) t   | filed on <u>21 Nove</u>  | <u>ember 2002</u> .   |  |  |  |  |  |
| 2a)[∑   | This action is FINAL.  | 2b) This ac  | ction is non-final.   |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims |  |  |   |  |  |  |  |  |
| •   | Claim(s) <u>2-15</u> is/are pending in the   | annlication  |   |  |  |  |  |  |
| 4/12  | 4a) Of the above claim(s) $8-13$ is/ar   |  | m consideration.  |  |  |  |  |  |
| 5)[   | Claim(s) is/are allowed.   | o marami no  | , ii oonoraaran   |  |  |  |  |  |
|   | 6)⊠ Claim(s) <u>2-7,14,15</u> is/are rejected.   |  |   |  |  |  |  |  |
|   | Claim(s) is/are objected to.   |  |   |  |  |  |  |  |
| •   | Claim(s) are subject to restri   | iction and/or ele  | ection requirement.   |  |  |  |  |  |
| • -   | ation Papers   |  | ·   |  |  |  |  |  |
| 9)[   | ] The specification is objected to by the  | ne Examiner.   |   |  |  |  |  |  |
| 10)[  | The drawing(s) filed on is/are   | : a) accepted  | or b)□ objected to by   | the Examiner.  |  |  |  |  |
|   | Applicant may not request that any of  |  |   |  |  |  |  |  |
| 11)[  | The proposed drawing correction file   | ed on is:  | a)∐ approved b)∐ (  | disapproved by the Examir  | ner.                                   |  |  |  |
|   | If approved, corrected drawings are re   | equired in reply to  | this Office action.   |  |  |  |  |  |
| 12)[  | ] The oath or declaration is objected t  | o by the Exami   | ner.  |  |  |  |  |  |
| Priority  | under 35 U.S.C. §§ 119 and 120   |  |   |  |  |  |  |  |
| 13)[  | Acknowledgment is made of a clair  | n for foreign pri  | ority under 35 U.S.C.   | § 119(a)-(d) or (f).   |  |  |  |  |
| á   | a) All b) Some * c) None of:   |  |   |  |  |  |  |  |
|   | 1. Certified copies of the priority  | y documents ha   | ve been received.   |  |  |  |  |  |
|   | 2. Certified copies of the priority  | documents ha   | ve been received in A   | Application No   |  |  |  |  |
| ,   | 3. Copies of the certified copies application from the Inter See the attached detailed Office acti   | national Bureau  | (PCT Rule 17.2(a)).   |  | Stage                                  |  |  |  |
| 14)   | Acknowledgment is made of a claim  | for domestic pri   | ority under 35 U.S.C.   | § 119(e) (to a provisiona  | al application).                       |  |  |  |
| 15)[  | <ul> <li>a)                The translation of the foreign la         </li> <li>Acknowledgment is made of a claim</li> </ul>  |  | - · ·   |  |  |  |  |  |
| Attachm   | ent(s)   |  |   |  |  |  |  |  |
| 2) 🔲 No   | tice of References Cited (PTO-892)<br>tice of Draftsperson's Patent Drawing Review (<br>prmation Disclosure Statement(s) (PTO-1449)  |  | 5) Notice of  | Summary (PTO-413) Paper No<br>Informal Patent Application (PT  |  |  |  |  |
|   |  |  |   |  |  |  |  |  |

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#### DETAILED ACTION

Applicant's arguments filed on November 21, 2002 have been fully considered but they are not persuasive.

# Claim Rejections - 35 USC § 112

Claims 2 to 7, 14 and 15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims recite that the separation triggering elements have a spacing sufficient so as to produce distinct zones of jet separation to form a three-dimensional separation of the flow.

However, the specification fails to disclose what is the minimum sufficient spacing which would produce the desired zones of jet separation.

Claim 14 recites "at least two mutually spaced separation triggering elements".

However, there is clearly a limit on the number of mutually spaced separation triggering elements which would produce the desired effect. There is no mention of this limit in the specification.

Applicant's invention purports to be an improvement over US Pat. No. 3,925,982 (Mueller) and the specification states that the injection points of Mueller are closely spaced and therefore do not produce a three-dimensional separation of the flow. This raises the question of what is the minimum sufficient required spacing for forming a three-dimensional separation of the flow.

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Claims 2 to 7, 14 and 15 are also rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Because of the basis of these claims on an inadequate disclosure, the scope thereof cannot be clearly ascertained.

## Claim Rejections - 35 USC § 102

Claims 2 to 7, 14 and 15, as understood, are rejected under 35 U.S.C. 102(b) as being structurally anticipated by either of Mueller (see figure 5) or Rannie et al. (see figures 4 and 5). Whether or not three-dimensional separation of the flow occurs is a function of the minimum spacing of the separation triggering elements, which is not claimed. The claims recite "at least two separation triggering elements" which is readable on either of Mueller or Rannie et al.

Reciting that the spacing of the triggering elements is "sufficient" for generating distinct zones of jet separation is merely a recitation of a desired result, which is not patentably limiting. No specific spacing is recited.

Applicants arguments are merely allegations of differences between the operation of the nozzles of Mueller and Rannie et al. Applicant fails to point out how the claims define structurally over the prior art.

Claims 8 to 13 stand withdrawn from further consideration as being drawn to a nonelected species. Application/Control Number: 09/534,196

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#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry relating to the status of this application or proceeding should be directed to the Customer Service Office whose telephone number is 703-306-5648.

Any inquiry relating to patent applications in general should be directed to the Patent Assistance Center at 1-800-786-9199.

Michael Koczo, Jr. Primary Examiner

Group Art Unit 3746

M. Koczo, Jr./mnk December 18, 2002 TEL 703-308-2630 M-F 7:30 to 16:00 FAX 703-308-7763